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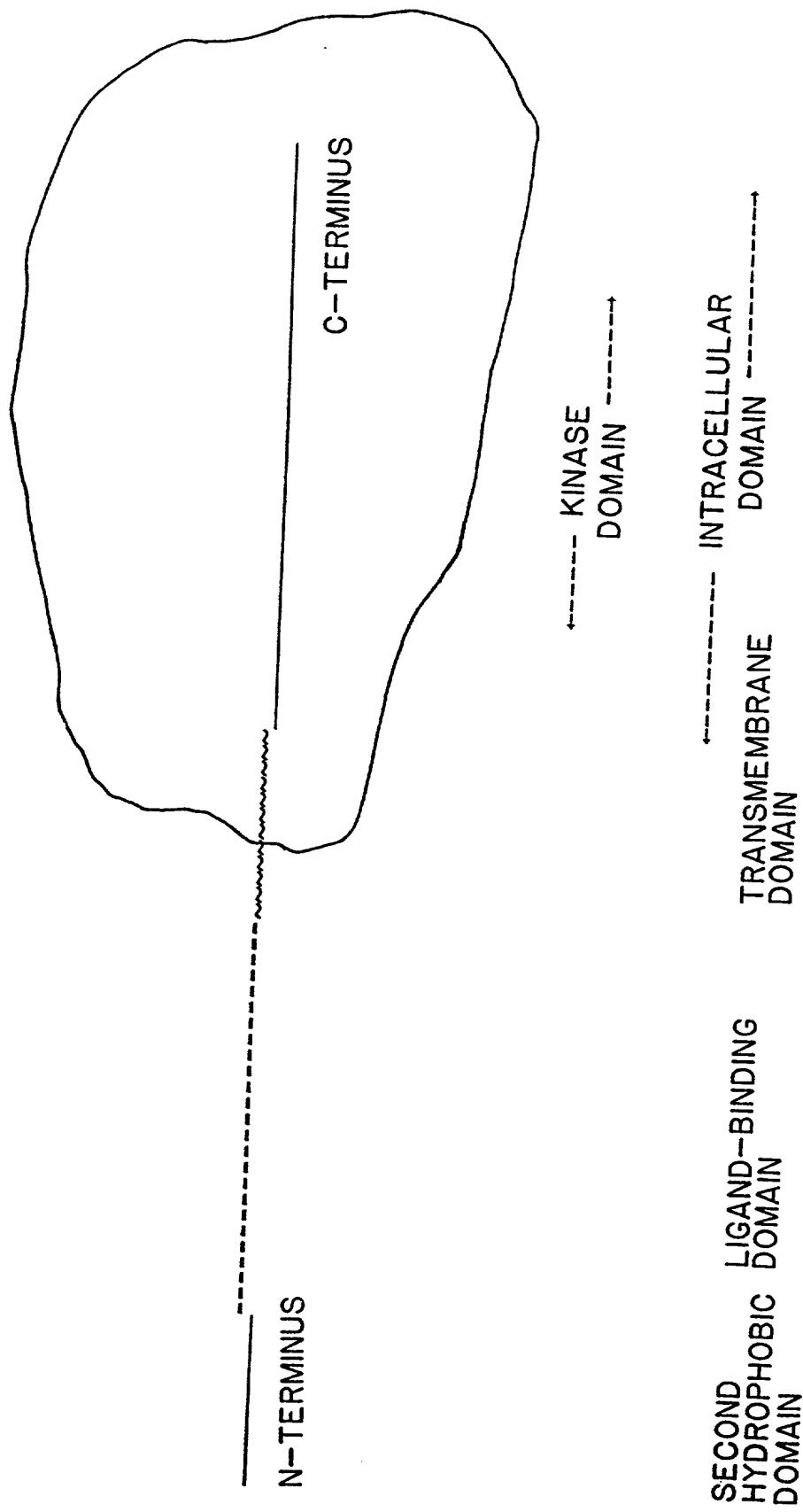
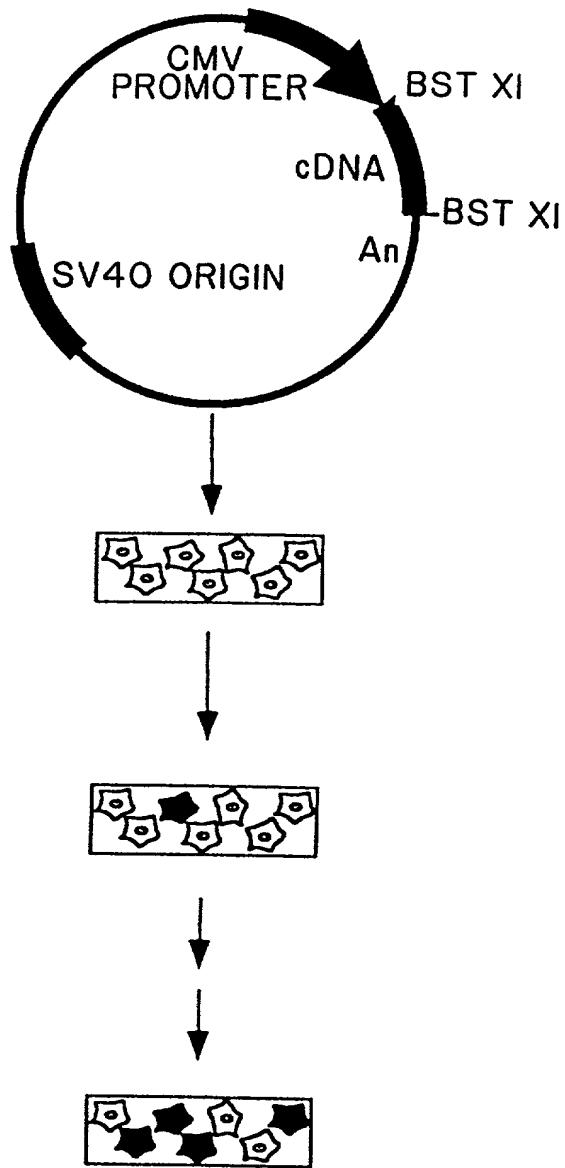


FIG. 1

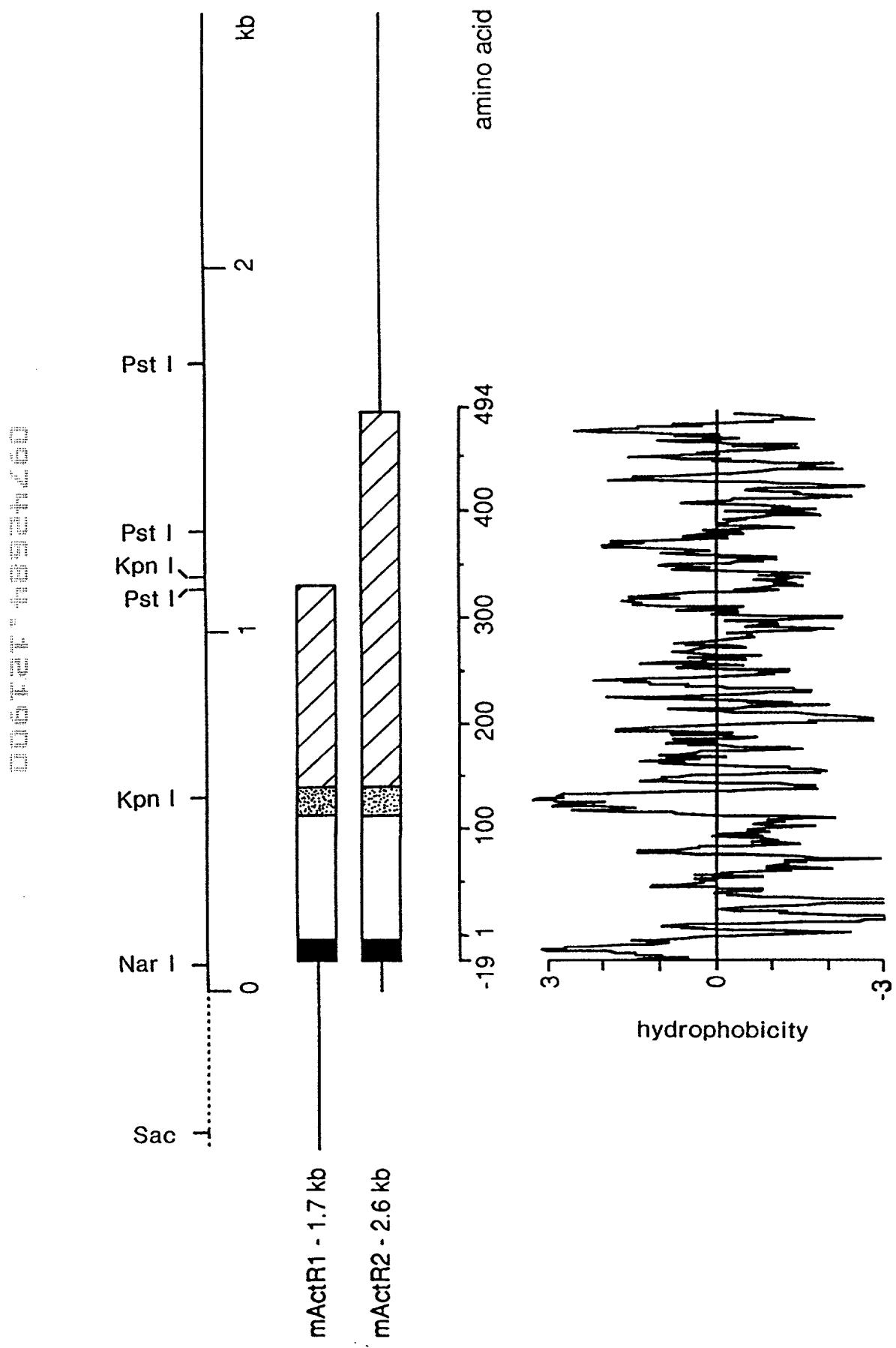
Divide a cDNA library in a mammalian expression vector into pools of 1000 clones, prepare DNA from each pool



Bind  $[^{125}\text{I}]$  activin A, wash cells, fix, dip in photographic emulsion

Subdivide bacteria from positive pool and rescreen; repeat until receptor clone is pure

FIG. 2



**FIG. 3**

Act	R	(174) <b>E</b> LLEVKGREGFV <b>E</b> TVKAQLE <b>E</b> VAVK <b>I</b> F FP <b>DDKQSWQ</b> EEEVYSLPGM <b>H</b> <b>N</b> <b>I</b> <b>L</b> <b>Q</b> <b>I</b> <b>G</b> <b>A</b> <b>E</b> <b>K</b> <b>R</b> <b>O</b> <b>T</b> SVDV <b>T</b> <b>I</b> <b>W</b> <b>L</b> <b>I</b> <b>F</b> <b>A</b>	*	*	*	*	*	*	*	*	*	*	
Daf	(295) <b>E</b> LTGRVGREGF <b>V</b> <b>N</b> <b>S</b> <b>R</b> <b>G</b> <b>D</b> <b>Y</b> <b>E</b> <b>E</b> <b>V</b> <b>A</b> <b>V</b> <b>K</b> <b>E</b> <b>F</b> <b>N</b> <b>A</b> <b>D</b> <b>D</b> <b>E</b> <b>P</b> <b>A</b> <b>F</b> <b>E</b> <b>E</b> <b>I</b> <b>F</b> <b>E</b> <b>T</b> <b>R</b> <b>M</b> <b>L</b> <b>E</b> <b>H</b> <b>N</b> <b>I</b> <b>L</b> <b>R</b> <b>I</b> <b>G</b> <b>S</b> <b>D</b> <b>R</b> <b>V</b> <b>I</b> <b>T</b> <b>G</b> <b>F</b> <b>V</b> <b>T</b> <b>E</b> <b>L</b> <b>W</b> <b>L</b> <b>V</b> <b>I</b> <b>E</b>												
Subdomain	I	II	III	IV	V	VIA	VII	VIB	VII	VIII	IX	XI	
Act	R	EFHGSLSDEFLNA <b>V</b> <b>V</b> <b>S</b> <b>W</b> <b>N</b> <b>E</b> <b>L</b> <b>C</b> <b>H</b> <b>I</b> <b>A</b> <b>E</b> <b>T</b> <b>A</b> <b>F</b> <b>G</b> <b>L</b> <b>A</b> <b>P</b> <b>I</b> <b>H</b> <b>E</b> <b>I</b> <b>G</b> <b>C</b> <b>K</b> <b>D</b> <b>G</b> <b>K</b> <b>P</b> <b>A</b> <b>I</b> <b>H</b> <b>R</b> <b>D</b> <b>I</b> <b>K</b> <b>S</b> <b>K</b> <b>N</b> <b>J</b> <b>V</b> <b>L</b> <b>K</b> <b>N</b> <b>J</b> <b>T</b> <b>A</b> <b>C</b> <b>I</b> <b>P</b> <b>F</b> <b>L</b>											
Daf		EHYGSLSDEFLN <b>E</b> <b>N</b> <b>T</b> <b>E</b> <b>T</b> <b>Y</b> <b>N</b> <b>L</b> <b>M</b> <b>R</b> <b>S</b> <b>A</b> <b>V</b> <b>G</b> <b>L</b> <b>A</b> <b>H</b> <b>N</b> <b>I</b> <b>G</b> <b>C</b> <b>K</b> <b>E</b> <b>S</b> <b>K</b> <b>P</b> <b>A</b> <b>M</b> <b>H</b> <b>R</b> <b>D</b> <b>I</b> <b>K</b> <b>S</b> <b>K</b> <b>N</b> <b>J</b> <b>M</b> <b>N</b> <b>J</b> <b>T</b> <b>C</b> <b>F</b> <b>I</b> <b>O</b> <b>I</b> <b>E</b> <b>L</b>											
Subdomain	V												
Act	R	LAIKF . <b>A</b> <b>B</b> <b>A</b> <b>G</b> <b>K</b> <b>S</b> <b>A</b> <b>G</b> <b>D</b> <b>T</b> <b>H</b> <b>G</b> <b>F</b> <b>R</b> <b>Y</b> <b>A</b> <b>E</b> <b>F</b> <b>H</b> <b>L</b> <b>E</b> <b>G</b> <b>A</b> <b>E</b> <b>F</b> <b>F</b> <b>Q</b> <b>R</b> <b>.D</b> <b>A</b> <b>F</b> <b>L</b> <b>R</b> <b>D</b> <b>D</b> <b>Y</b> <b>A</b> <b>M</b> <b>L</b> <b>V</b> <b>I</b> <b>W</b> <b>E</b> <b>L</b> <b>A</b> <b>R</b> <b>C</b> <b>T</b> <b>A</b> <b>D</b> <b>G</b> <b>I</b> <b>V</b> <b>D</b> <b>E</b> <b>Y</b> <b>M</b> <b>L</b> <b>P</b>											
Daf		LSLSKPEA <b>A</b> <b>S</b> <b>D</b> <b>I</b> <b>I</b> <b>A</b> <b>N</b> <b>E</b> <b>Y</b> <b>G</b> <b>T</b> <b>R</b> <b>Y</b> <b>A</b> <b>E</b> <b>F</b> <b>H</b> <b>I</b> <b>L</b> <b>N</b> <b>S</b> <b>T</b> <b>M</b> <b>E</b> <b>F</b> <b>T</b> <b>V</b> <b>F</b> <b>E</b> <b>S</b> <b>Y</b> <b>Q</b> <b>D</b> <b>D</b> <b>Y</b> <b>K</b> <b>S</b> <b>F</b> <b>L</b> <b>V</b> <b>W</b> <b>E</b> <b>T</b> <b>L</b> <b>R</b> <b>C</b> <b>.D</b> <b>G</b> <b>I</b> <b>V</b> <b>L</b> <b>P</b> <b>R</b> <b>E</b> <b>A</b> <b>A</b>											
Subdomain	VII												
Act	R	FE . <b>E</b> <b>E</b> <b>E</b> <b>I</b> <b>G</b> <b>E</b> <b>P</b> <b>S</b> <b>L</b> <b>M</b> <b>M</b> <b>V</b> <b>V</b> <b>H</b> <b>K</b> <b>R</b> <b>E</b> <b>P</b> <b>V</b> <b>L</b> <b>R</b> <b>D</b> <b>W</b> <b>Q</b> <b>E</b> <b>H</b> <b>A</b> <b>M</b> <b>A</b> <b>M</b> <b>L</b> <b>E</b> <b>F</b> <b>I</b> <b>E</b> <b>C</b> <b>W</b> <b>D</b> <b>H</b> <b>D</b> <b>A</b> <b>F</b> <b>R</b> <b>L</b> <b>S</b> <b>A</b> <b>G</b> <b>V</b> <b>G</b> <b>E</b> <b>R</b> <b>I</b> <b>T</b> <b>O</b> <b>M</b> <b>O</b> <b>R</b> <b>E</b>											
Daf		TVIPEIEWTD <b>D</b> <b>D</b> <b>P</b> <b>Q</b> <b>D</b> <b>M</b> <b>M</b> <b>V</b> <b>V</b> <b>V</b> <b>C</b> <b>T</b> <b>R</b> <b>R</b> <b>P</b> <b>P</b> <b>T</b> <b>E</b> <b>N</b> <b>W</b> <b>M</b> <b>K</b> <b>H</b> <b>E</b> <b>H</b> <b>F</b> <b>M</b> <b>M</b> <b>K</b> <b>H</b> <b>E</b> <b>E</b> <b>I</b> <b>I</b> <b>K</b> <b>C</b> <b>W</b> <b>A</b> <b>G</b> <b>N</b> <b>P</b> <b>S</b> <b>A</b> <b>R</b> <b>F</b> <b>T</b> <b>S</b> <b>Y</b> <b>I</b> <b>C</b> <b>R</b> <b>I</b> <b>R</b> <b>M</b> <b>D</b> <b>E</b> <b>R</b> <b>O</b> <b>Q</b> <b>L</b>											
Subdomain	X												

FIG. 4

FIG. 5A

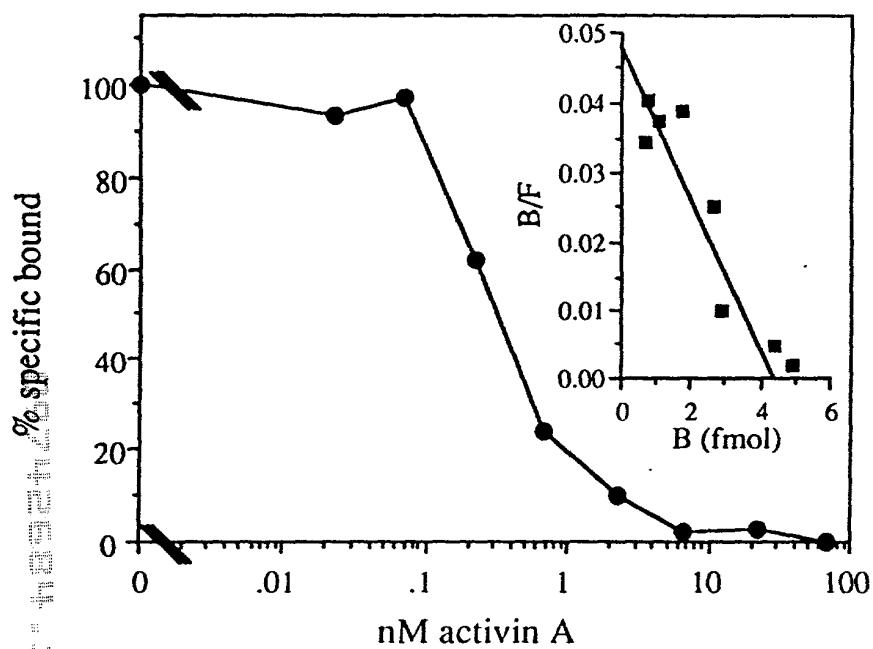
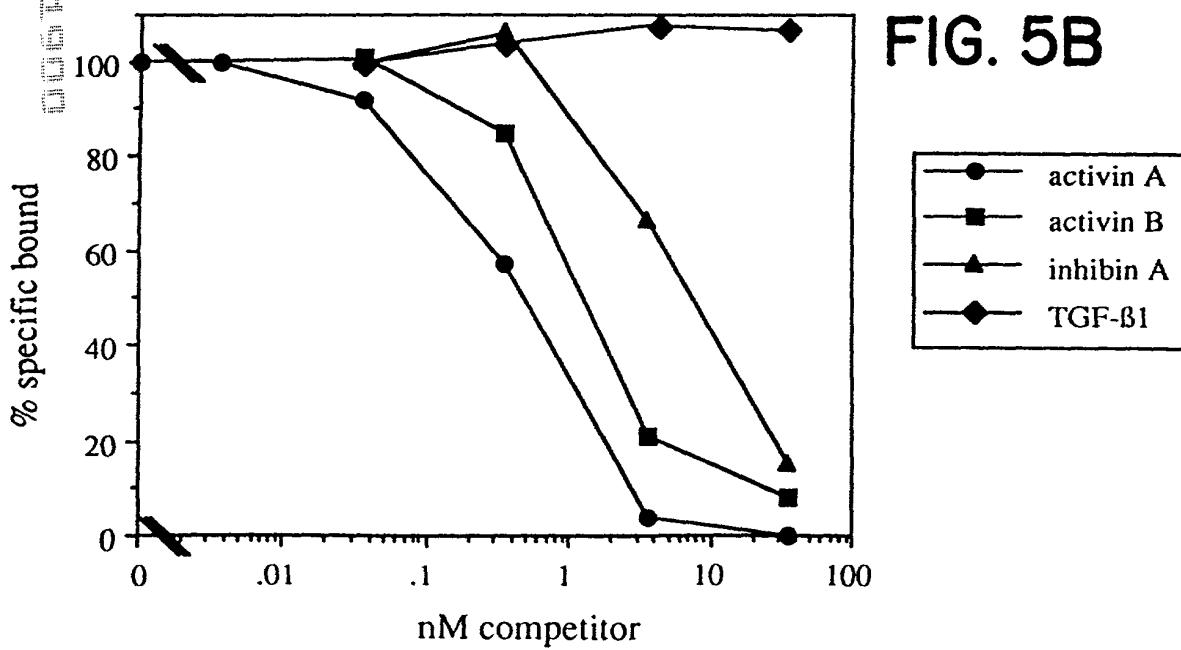


FIG. 5B



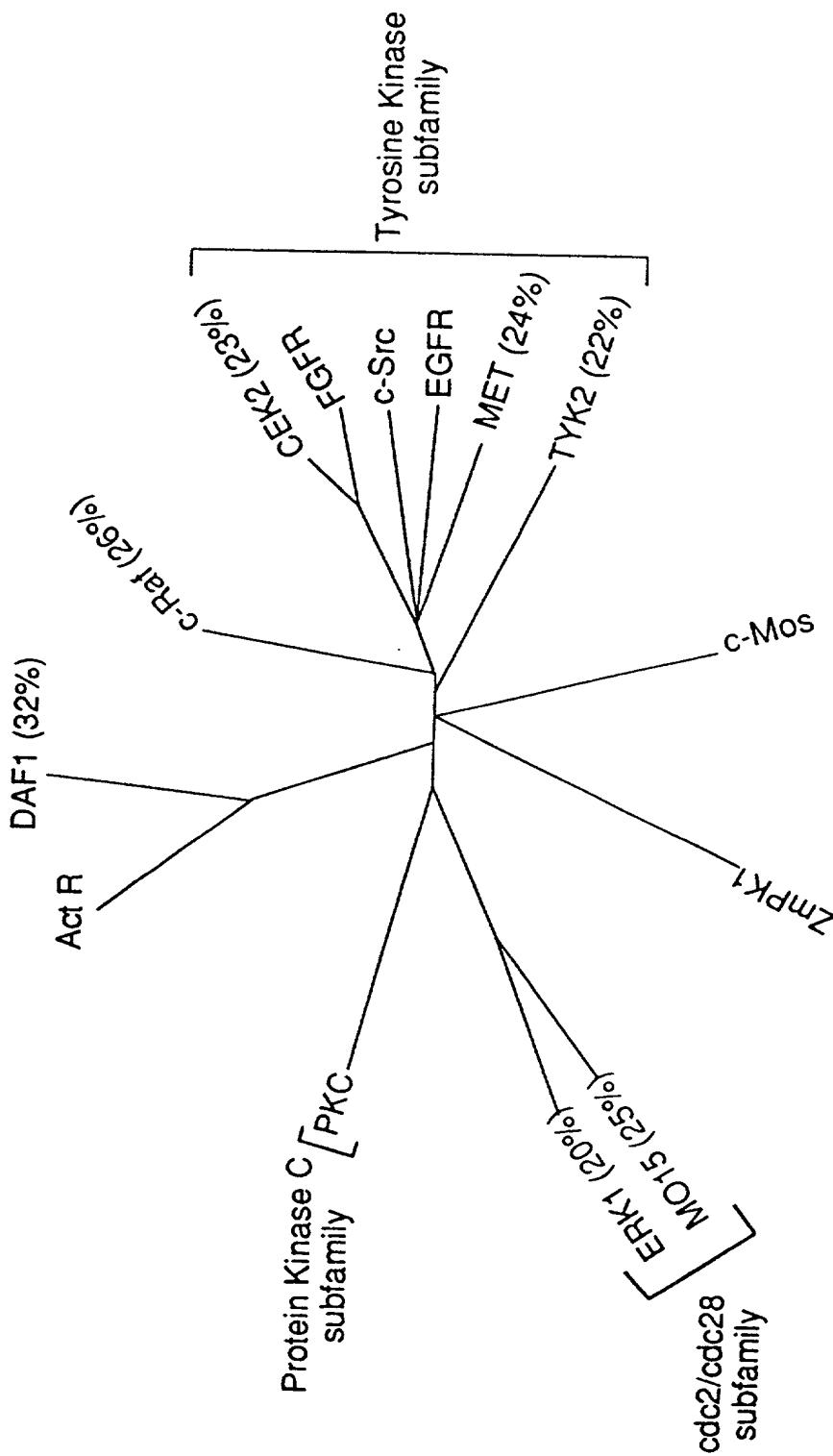


FIG. 6